

with a female and immediately mated. Next day he was placed with another female and immediately mated. Both females deposited eggs, and the young began feeding in the wood, but the female parents at no time displayed a desire for a migration flight. It is believed the colony was originally from a single set of eggs and that more than two generations would have been passed within the log in nature.

In the second group the "provisions" against, or obstacles to inbreeding assume varied forms. Usually the ratio chance of unions between brothers and sisters to unions between unrelated individuals, is so low that the offspring would be quickly reabsorbed into the normal form, but the details of habit that control this low percentage may be varied. Chief of these is the instinct for migration, which appears to precede sexual maturity in many social insects, but there appears to be also a remarkable difference in time of development of the opposite sexes among the progeny of a single parent of some species. The writer believes from preliminary experiments, that in *Phengodes* the males develop after two years in the larval stage, while their sisters must spend three or more years as larvæ. In this genus the males are strong migrants while the females must lay their eggs where they have transformed. The writer has shown that in *Micromalthus* the males issue about two weeks after their sisters are out, but subsequent observations indicate that males issue abnormally or irregularly at times. Attempts to mate specimens from different colonies in the breeding cells all failed, and as both males and females manifested only a desire to migrate from the time of their issuance almost until death, it is believed sexual maturity will develop only after such migratory flight.

ON THE PROPER GENERIC NAMES FOR CERTAIN THYSANOPTERA OF ECONOMIC IMPORTANCE.

By J. DOUGLAS HOOD, *United States Biological Survey.*

The tobacco thrips, the pear thrips, and the orange thrips—species responsible in the United States for damage amounting to many thousands of dollars every year and each the subject of several published accounts—are at present wrongly placed in the genus *Euthrips* Targioni-Tozzetti by all North American workers. The purpose of this paper is to correct the generic positions of these and other allied species and to direct attention to several papers which have been overlooked in America, that the proper names for these insects may be used in the rapidly-growing economic literature.

To this end the present account is divided into three parts: first, a brief, general discussion of the nomenclature of the several groups of species which have masqueraded under the name *Euthrips*; second, a catalogue of the American components of the genera to which these species, in the light of our present knowledge, actually belong; and, third, a bibliography of all papers necessary to a proper study of these problems. To the papers by Buffa (1907) and Karny (1912) I am particularly indebted for many of the points brought out below.

Probably no other genus of Thysanoptera has presented more difficult questions of nomenclature, nor disclosed more diverse opinions regarding its proper application, than the genus *Euthrips* Targioni-Tozzetti. It was proposed in 1881 as a substitute for the name *Thrips* which has been used by Haliday (1836) for a subgenus of *Thrips* Linné (1758),—evidently for no better reason than to avoid the duplication of the generic name in a subgenus. Haliday divided Linné's genus *Thrips* into the five subgenera, *Aptinothrips*, *Chirothrips*, *Limothrips*, *Belothrips*, and *Thrips* s.s., of which the first four were new. Targioni-Tozzetti accepted the division of the genus into five subgenera and, except for a few slight changes, reproduced Haliday's key in Italian. The only important change was the employment of the subgeneric name *Euthrips* in the place of *Thrips*. That he proposed *Euthrips* in the sense of *Thrips* s. s., is shown by: (1) its derivation (from $\epsilon\upsilon$, true or well + $\theta\rho\iota\psi$); (2) the placing of *Thrips* in its synonymy in two places; (3) the fact that he does not use the subgeneric name *Thrips*; and (4) the inclusion in *Euthrips* of the species which Haliday assigned to the subgenus *Thrips*. This suppression of the subgenus *Thrips* is in direct opposition to Article 9 of the International Code of Zoological Nomenclature, which reads as follows: "If a genus is divided into subgenera, the name of the typical subgenus must be the same as the name of the genus." Article 31 of the Entomological Code (Banks and Caudell, 1912) is equally explicit. It is evident, therefore, that *Euthrips* Targioni-Tozzetti (1881) is an absolute synonym of the genus *Thrips* Linné (1758), and isogenotypic therewith.¹ *Euthrips*, therefore, can never be used as a generic name in zoology.

Karny (1912) and Buffa (1907), by a different course of reasoning, retain *Euthrips* as a valid generic name, and use it in the place of *Anaphothrips* Uzel. According to them, the type of *Euthrips* must be chosen from one of its three originally included species. This contention I have shown to be at fault, for the name was erected as a substitute for a perfectly valid older name which was

¹ The type of *Thrips* Linné (1758) was designated as *T. physapus* L. by Westwood in 1840.

cited in its synonymy. *Anaphothrips* is thus restored in the sense of *Euthrips*, Karny (nec Targioni-Tozzetti), and its type hereby designated as *Thrips obscura* Müller (= *Thrips striata* Osborn = *Anaphothrips virgo* Uzel).

In the place of *Euthrips* the European workers for many years used the name *Physapus* De Geer (or *Physopus*, as emended by Uzel). This name was first used by De Geer in 1744, before the appearance of Linné's *Systema Naturæ*, and is thus without standing in zoological nomenclature. In 1773 De Geer cited his earlier paper, but accepted Linné's name *Thrips* (1758). Hence the name *Physapus* can not date from this use by De Geer in 1773. Opinion 5, rendered by the International Commission on Zoological Nomenclature, covers this point in the following words: "A pre-Linnæan name, ineligible because of its publication prior to 1758, does not become eligible simply by being cited or reprinted with its original diagnosis after 1757. To become eligible under the Code, such names must be reinforced by adoption or acceptance by the author publishing the reprint." A ruling to this effect is also incorporated in the Entomological Code. *Physapus*, then, must date from its definition by Amyot and Serville in 1843, this being its first adoption in literature subsequent to 1758. The name is preempted, however, by *Physapus* Leach (1830?, see Bibliography), a genus of Ephemera. *Physopus*, Uzel (1895), is also unavailable, being simply an emended spelling of the older name. *Physapus*, therefore, can not be used as a generic name in *Thysanoptera*.

The literature previous to 1907 furnishes only two names that may be used for the mutually homogeneous segregates of this old genus *Physapus* (= *Euthrips*, auctores, nec Targioni-Tozzetti). These are *Taniothrips* Amyot et Serville (type, *Thrips primula* Haliday) and *Odonthrips* Amyot et Serville (type, *Thrips phalerata* Haliday), both erected in 1843.

To the former of these belongs *Euthrips pyri* Daniel, the pear thrips. It is positively congeneric with *T. primula* (Haliday), and even under the microscope might easily be mistaken for that species. *Primula* differs from *pyri* principally in that the apical antennal segments are much more slender and the anterior vein of the fore wings is set with three spines, instead of five, in its apical half.

To *Odonthrips* must be assigned two North American species commonly listed in *Euthrips*. These are *Euthrips ulicis californicus* Moulton, described as a variety of Haliday's *Thrips ulicis*; and *Thrips phalerata* Haliday, recently recorded by Morgan (1913) from Florida under the name *Euthrips phalerata*.

This disposes of three of the twenty-two species of "*Euthrips*" recorded from North America. Of the remainder, one, *Euthrips*

citri Moulton, the orange thrips, belongs in the genus *Scirtothrips* Shull (1909). This genus was compared at the time of its original description with *Anaphothrips* Uzel, to which, however, it is not at all closely related. The most casual observation under high magnification shows the thorax of all the known species to be finely and closely transversely striate and the abdomen to be clothed more or less completely with minute, hair-like, chitinous processes. These characters ally it rather closely to *Sericothrips* Haliday, from which it differs notably in the more sparsely spinose anterior vein of the fore wing. As in *Sericothrips*, the species are active jumpers, and in life or when mounted dry have a dull, silky luster. To *Scirtothrips*, therefore, in addition to the type species *ruthveni* Shull and *S. niveus* Hood, must be assigned *Euthrips citri* Moulton (the orange thrips), *Euthrips longipennis* Bagnall (= *Euthrips parvus* Moulton), *Anaphothrips albus* Jones, and a sixth species whose description by the writer will probably appear elsewhere before the publication of the present paper.

Thirteen additional species, all but two of which were described in *Euthrips* by American authors, really belong with *Frankliniella stylosa* Hood in the genus *Frankliniella* Karny (1910), which was erected at the instance of Franklin (1908) as a substitute for *Physapus*, Karny (nec Amyot et Serville). As the type of this genus has never been fixed, I hereby designate *Thrips intonsa* Trybom (= *Physopus vulgarissima*, Uzel, nec Haliday) as the genotype. The North American species belonging here are enumerated in the catalogue below.

The five remaining species (*Euthrips albus*, *E. chrhornii*, and *E. orchidii*, Moulton; and *E. costalis* and *E. longirostrum*, Jones) may all be placed for the present at least, in *Physothrips* Karny (1912). Only one of these, *Euthrips orchidii* Moulton, is in the material before me; it seems to be congeneric with *Physothrips ulmi-foliorum* (Haliday), the type of genus.

CATALOGUE.

No attempt has been made to cite every reference to the several species, only those being given which are of especial interest to the taxonomist.

FRANKLINIELLA Karny, 1910.

Thrips, *Physapus*, *Physopus*, and *Euthrips*, auct.

Frankliniella Karny, Mitteil. Naturw. Ver. Univ. Wien, Jahrg. VIII, p. 46 (type, *Thrips intonsa* Trybom, = *Physopus vulgarissima*, Uzel, nec Haliday, herein designated).

1. *bispinosa* (Morgan); *Euthrips tritici* var. *bispinosus* Morgan, Proc. U. S. Nat. Mus., vol. 46, 1913, p. 10, figs. 17-18.

2. *cephalica* (Crawford); *Euthrips cephalicus* Crawford, Pomona Coll. Journ. Ent., vol. II, 1910, p. 153, fig. 63, A-H; *Frankliniella cephalica*, Karny, Zool. Ann., vol. IV, 1912, p. 335.
3. *floridense* (Morgan); *Euthrips floridensis* Morgan, Proc. U. S. Nat. Mus., vol. 46, 1913, p. 5, figs. 9-12.
4. *fusca* (Hinds); *Euthrips fuscus* Hinds, Proc. U. S. Nat. Mus., vol. XXVI, 1902, p. 154, pl. IV, figs. 40, 41; *Euthrips nicotianæ* Hinds, Proc. Biol. Soc. Wash., vol. XVIII, 1905, p. 198; *Frankliniella fusca*, Karny, Zool. Ann., vol. IV, 1912, p. 335; *F. nicotiana*, idem, ibidem, p. 336.
5. *gossypii* (Morgan); *Euthrips gossypii* Morgan, Proc. U. S. Nat. Mus., vol. 46, 1913, p. 9, figs. 19-22.
6. *helianthi* (Moulton); *Euthrips helianthi* Moulton, Tech. Ser. No. 21, Bur. Ent., U. S. Dept. Agr., 1911, p. 40, pl. IV, figs. 26-29; *F. [Frankliniella] helianthi*, Karny, Zool. Ann., vol. IV, 1912, p. 336.
7. *insularis* (Franklin); *Euthrips insularis* Franklin, Proc. U. S. Nat. Mus., vol. XXXIII, 1908, p. 715, pl. LXIII, figs. 1-3, 5-7, pl. LXV, figs. 19, 24; *Euthrips insularis* var. *reticulata* Crawford, Pomona Coll. Journ. Ent., vol. I, 1909, p. 116 (a worthless variety); *Frankliniella insularis*, Karny, Zool. Ann., vol. IV, 1912, p. 334.
8. *minuta* (Moulton); *Euthrips minutus* Moulton, Tech. Ser. No. 12, Pt. III, Bur. Ent., U. S. Dept. Agr., 1907, p. 56, pl. IV, figs. 32, 33; *Euthrips minutus* var. *sefosus* Crawford, Pomona Coll. Journ., Ent., vol. I, 1909, p. 105, fig. 47, A-G (a worthless variety); *Frankliniella minuta*, Karny, Zool. Ann., vol. IV, 1912, p. 335.
9. *tritici* var. **moultoni**, **nom. nov.**; *Euthrips tritici californicus* Moulton, Tech. Ser. No. 21, Bur. Ent., U. S. Dept. Agr., 1911, p. 28; preempted¹ by *Euthrips ulicis californicus* Moulton, 1907, = *Odontothrips ulicis californicus* (Moulton).
10. *nervosa* (Uzel); *Physopus nervosa* Uzel, Mon. d. Ordn. Thys., 1895, p. 102; *Thrips (Euthrips) maidis* Beach, Proc. Iowa Acad. Sci., vol. III, 1896, p. 219; *Frankliniella nervosa*, Karny, Zool. Ann., vol. IV, 1912, p. 335.
11. *occidentalis* (Pergande); *Euthrips occidentalis* Pergande, Ins. Life., vol. VII, 1895, p. 392; *Frankliniella occidentalis*, Zool. Ann., vol. IV, 1912, p. 335.
12. *runneri* (Morgan); *Euthrips runneri* Morgan, Proc. U. S. Nat. Mus., vol. 46, 1913, p. 7, figs. 13-16.

¹ "Specific and subspecific names are subject to the same rules and recommendations, and from a nomenclatorial standpoint they are coordinate—that is, they are of the same value." (Article 11, International Code.) *Euthrips ulicis californicus* and *E. tritici californicus*, though both originally described as varieties, were written as trinomials, and thus brought within the scope of the above rule. The Entomological Code is more sweeping, specifying in Section 37 that, "In species, subspecies, varieties, or races, the same name shall not be used twice in the same genus."

13. *stylosa* Hood, Proc. Ent. Soc. Wash., vol. xiv, 1912, p. 134, pl. v, fig. 7.
 14. *tritici* (Fitch); *Thrips tritici* Fitch, Country Gentleman, vol. vi, 1855, p. 385, figs. a-g; *Frankliniella tritici*, Karny, Zool. Ann., vol. iv, 1912, p. 335.

PHYSOTHRIPS Karny, 1912.

Thrips, *Physapus*, *Physopus*, and *Euthrips*, auct.

Physothrips Karny, Zool. Ann., vol. iv, 1912, p. 336 (type, *Thrips ulmi-foliorum* Haliday, by designation).

1. *albus* (Moulton); *Euthrips albus* Moulton, Tech. Ser. No. 21, Bur. Ent., U. S. Dept. Agr., 1911, p. 39, pl. III, figs. 20-22, pl. IV, fig. 30; [*Physothrips*] *albus*, Karny, Zool. Ann., vol. iv, 1912, p. 340.
2. *costalis* (Jones); *Euthrips costalis* Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 13, pl. IV, figs. 1-4; [*Physothrips*] *costalis*, Karny, Zool. Ann., vol. iv, 1912, p. 344.
3. *ehrhornii* (Moulton); *Euthrips ehrhornii* Moulton, Tech. Ser. No. 12, Pt. III, Bur. Ent., U. S. Dept. Agr., 1907, p. 54, pl. III, figs. 25, 26; *Euthrips ehrhornii*, Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 12 (description of male); *Physothrips ehrhornii*, Karny, Zool. Ann., vol. iv, 1912, p. 338.
4. *longirostrum* (Jones); *Euthrips longirostrum* Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 12, pl. III, figs. 6-9; *Physothrips longirostrum*, Karny, Zool. Ann., vol. iv, 1912, p. 344.
5. *orchidii* (Moulton); *Euthrips orchidii* Moulton, Tech. Ser. No. 12, Pt. III, Bur. Ent., U. S. Dept. Agr., 1907, p. 52, pl. II, figs. 15-18; *Physothrips orchidii*, Karny, Zool. Ann., vol. iv, 1912, p. 339.

TÆNIOTHRIPS Amyot et Serville, 1843.

Thrips, *Physapus*, *Physopus*, and *Euthrips*, auct.

Tæniothrips Amyot and Serville, Hist. Nat. des Ins., Hémiptères, 1843, p. 644.

———, Karny, Zool. Ann., vol. iv, 1912, p. 340 (type, *Thrips primulae* Haliday, by designation).

1. *pyri* (Daniel); *Euthrips pyri* Daniel, Ent. News, vol. xv, 1904, p. 294; *Physothrips pyri*, Karny, Zool. Ann., vol. iv, 1912, p. 338.

ODONTOTHRIPS Amyot et Serville, 1843.

Thrips, *Physapus*, *Physopus*, and *Euthrips*, auct.

Odontothrips Amyot and Serville, Hist. Nat. des Ins., Hémiptères, 1843, p. 642.

———, Karny, Berl. Ent. Zeitschr., vol. LII, 1907, p. 45 (type *Thrips phalerata* Haliday, by designation).

———, Karny, Zool. Ann., vol. iv, 1912, p. 329.

1. *phaleratus* (Haliday); *Thr. [ips] phalerata* Haliday, Ent. Mag., vol. III, 1836, p. 447; *O. [donthrips] phalerata*, Amyot and Serville, Hist. Nat. des Ins., Hémiptères, 1843, p. 643; *Odonthrips phaleratus*, Karny, Zool. Ann., vol. IV, 1912, p. 329; *Euthrips phalerata*, Morgan, Proc. U. S. Nat. Mus., vol. 46, 1913, p. 1, figs. 1-4.
2. *ulicis californicus* (Moulton); *Euthrips ulicis californicus* Moulton, Tech. Ser. No. 12, Pt. III, Bur. Ent., U. S. Dept. Agr., 1907, p. 55, pl. iii, fig. 27, pl. iv, figs. 23-31; *Odonthrips ulicis*, Karny, Zool. Ann., vol. IV, 1912, p. 329.

SCIRTOTHRIPS Shull, 1909.

- Scirtothrips* Shull, Ent. News, vol. XX, 1909, p. 222 (type, *S. ruthveni* Shull, monobasic).
- Anaphothrips* (pars), Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 15.
- Physothrips* (pars), Karny, Zool. Ann., vol. IV, 1912, p. 336.
- Scirtothrips* (pars), idem, ibidem.
1. *albus* (Jones); *Anaphothrips albus* Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 16, pl. iv, figs. 5-8; [*Scirtothrips*] *albus*, Karny, Zool. Ann., vol. IV, 1912, p. 334.
 2. *citri* (Moulton), *Euthrips citri* Moulton, Tech. Ser. No. 12, Pt. VII, Bur. Ent., U. S. Dept. Agr., 1909, p. 121; *Physothrips citri*, Karny, Zool. Ann., vol. IV, 1912, p. 339.
 3. *longipennis* (Bagnall); *Euthrips longipennis* Bagnall, Ann. Soc. Ent. Belg., vol. LIII, 1909, p. 173; *Euthrips parvus* Moulton, Tech. Ser. No. 21, Bur. Ent., U. S. Dept. Agr., 1911, p. 38, pl. iv, figs. 23-25.
 4. *niveus* Hood, Proc. Biol. Soc. Wash., vol. XXVI, 1913, p. 161.
 5. *ruthveni* Shull, Ent. News, vol. XX, 1909, p. 222, figs. 2-4; *Anaphothrips ruthveni*, Jones, Tech. Ser. No. 23, Pt. I, Bur. Ent., U. S. Dept. Agr., 1912, p. 15.

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- 1830 LEACH, WILLIAM ELFORD, Entomology, The Edinburgh Encyclopaedia, vol. IX, pp. 57-172 (Reprint?). The name *Physapus* proposed for a genus of *Ephemerida* on page 137. (Agassiz gives 1817 as the date of erection of *Physapus*, which was copied by Scudder; Hinds gives the following reference in his bibliography, "Leach, W. E., Amer. ed., New Edinburgh Encyclopaedia, VIII₂, 1816, p. 715"; other authors give dates ranging from 1814-1817. However, the paper was certainly published prior to 1843, the date of erection of *Physapus* Amyot et Serville.)
- 1836 HALIDAY, ALEXIS H., An Epitome of the British Genera, in the Order Thysanoptera, with Indications of a few of the Species, Ent. Mag., vol. III, pp. 439-451. The genus *Thrips* divided into five subgenera; original descriptions of *Odontothrips ulicis* and *O. phaleratus*.
- 1840 WESTWOOD, JOHN OBADIAH, Synopsis of the Genera of British Insects, pp. 1-158 (bound at end of vol. II of An Introduction to the Modern Classification of Insects. *Thrips physapus* L. designated as the type of *Thrips* Linné.)
- 1843 AMYOT, CHARLES JEAN BAPTISTE, and SERVILLE, JEAN GUILLAUME AUDINET, Hist. Nat. des Insectes, Hémiptères, pp. 9 and 637-646. The genus *Physapus* De Geer revived; *Odontothrips* and *Taniothrips* described as new.
- 1855 FITCH, ASA, The Wheat Thrips and Three-banded Thrips, Country Gent., vol. VI, pp. 385-386, figs. a-g. Original description of *Frankliniella tritici*.
- 1881 TARGIONI-POZZETTI, GIOVANNI, Fisapodi, Annali di Agricoltura, 1881, No. 34, Parte Scientifica, pp. 120-134, Tav. 3, figs. 14, 15a-15g. The subgenus *Euthrips* erected as a substitute for *Thrips* s.s.
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- 1911 MOULTON, DUDLEY, Synopsis, Catalogue, and Bibliography of North American Thysanoptera, with Descriptions of New Species, Tech. Ser. No. 21, Bur. Ent., U. S. Dept. Agr., pp. 1-56. pls. I-VI. Key to North American species of "*Euthrips*" (nec Targioni-Tozzetti); *Scirtothrips longipennis* redescribed as *Euthrips parvus*; original descriptions of *Frankliniella helianthi* and of *Physothrips albus*. The following names are omitted from the list of North American species:
1. Genus *Ctenothrips* Franklin.
 2. *Ctenothrips bridwelli* Franklin.
 3. *Anaphothrips secticornis* (Trybom).
 4. *Anaphothrips longipennis* Crawford.
 5. *Thrips lactuce* Beach.
 6. *Thrips trifasciatus* Ashmead.
 7. *Phlæothrips caryæ* Fitch.
 8. *Phlæothrips mali* Fitch.
- 1911 TRYBOM, FILIP, Physapoden aus Ägypten und dem Sudan, Results of the Swedish Zool. Exped. to Egypt and the White Nile, 1901, No. 19, pp. 1-16, Taf. I. *Physapus* declared a valid genus name in Thysanoptera.
- 1912 JONES, PAUL ROBERT, Some New California and Georgia Thysanoptera, Tech. Ser. No 23, Pt. I, Bur. Ent., U. S. Dept. Agr., pp. 1-VI, 1-24, pls. I-VII. Key to North American species of "*Euthrips*" (nec Targioni-Tozzetti); *Scirtothrips* sunk as a synonym of *Anaphothrips*; *Physothrips costalis*, *Ph. longirostrum*, and *Scirtothrips albus* described as new.
- 1912 KARNY, HEINRICH, Revision der von Serville aufgestellten Thysanopteren-Genera, Zool. Ann., vol. IV, pp. 322-344. The genus *Thysothrips* erected; *Euthrips* used for the first time in the sense of *Anaphothrips* Uzel; an excellent synopsis of the known species of the various genera.
- 1912 BANKS, NATHAN, AND CAUDELL, ANDREW NELSON, The Entomological Code, a Code of Nomenclature for Use in Entomology, Washington, D. C., May, 1912 (published privately). A very comprehensive code of nomenclature, distributed free by the authors.
- 1912 HOOD, JOSEPH DOUGLAS, Descriptions of New North American Thysanoptera, Proc. Ent. Soc. Wash., vol. XIV, pp. 129-160, pls. IV-VIII. Original description of *Frankliniella stylosa*.
- 1913 HOOD, JOSEPH DOUGLAS, Nine New Thysanoptera from the United States, Proc. Biol. Soc. Wash., vol. XXVI, pp. 161-166. Original description of *Scirtothrips niveus*.

- 1913 MORGAN, ALFRED COOKMAN, New Genera and Species of Thysanoptera, with Notes on Distribution and Food Plants, Proc. U. S. Nat. Mus., vol. 46, pp. 1-55, figs. 1-79. *Odontothrips phaleratus* (Haliday) recorded for the first time from North America; original descriptions of *Frankliniella bispinosa* (Morgan), *F. floridense* (Morgan), *F. gossypii* (Morgan), and *F. runneri* (Morgan), all of which were assigned to *Euthrips*.

A NEW MITE FROM THURBERIA.

BY NATHAN BANKS, *Bureau of Entomology.*

Eriophyes thurberiae n.sp.

Body but little more than three times as long as broad, tapering but little behind; the cephalic plate rather narrow in front, with lines, and two rather long dorsal setæ. Abdomen with about fifty rings, plainly punctured; first ventral setæ fully as long as width of body, second pair not noticeable, third pair not as long as width of body, caudal setæ heavier, as long as twice width of body. Legs very short, hardly as long as one-half of width of body, last joint (fifth) nearly as long as preceding joint, but very much more slender, third joint about as long as fourth and fully as thick. Length, 140 μ .

Inhabits much-folded gall on leaves of *Thurberia thespesioides*, near Tucson, Arizona (Pierce coll.).

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